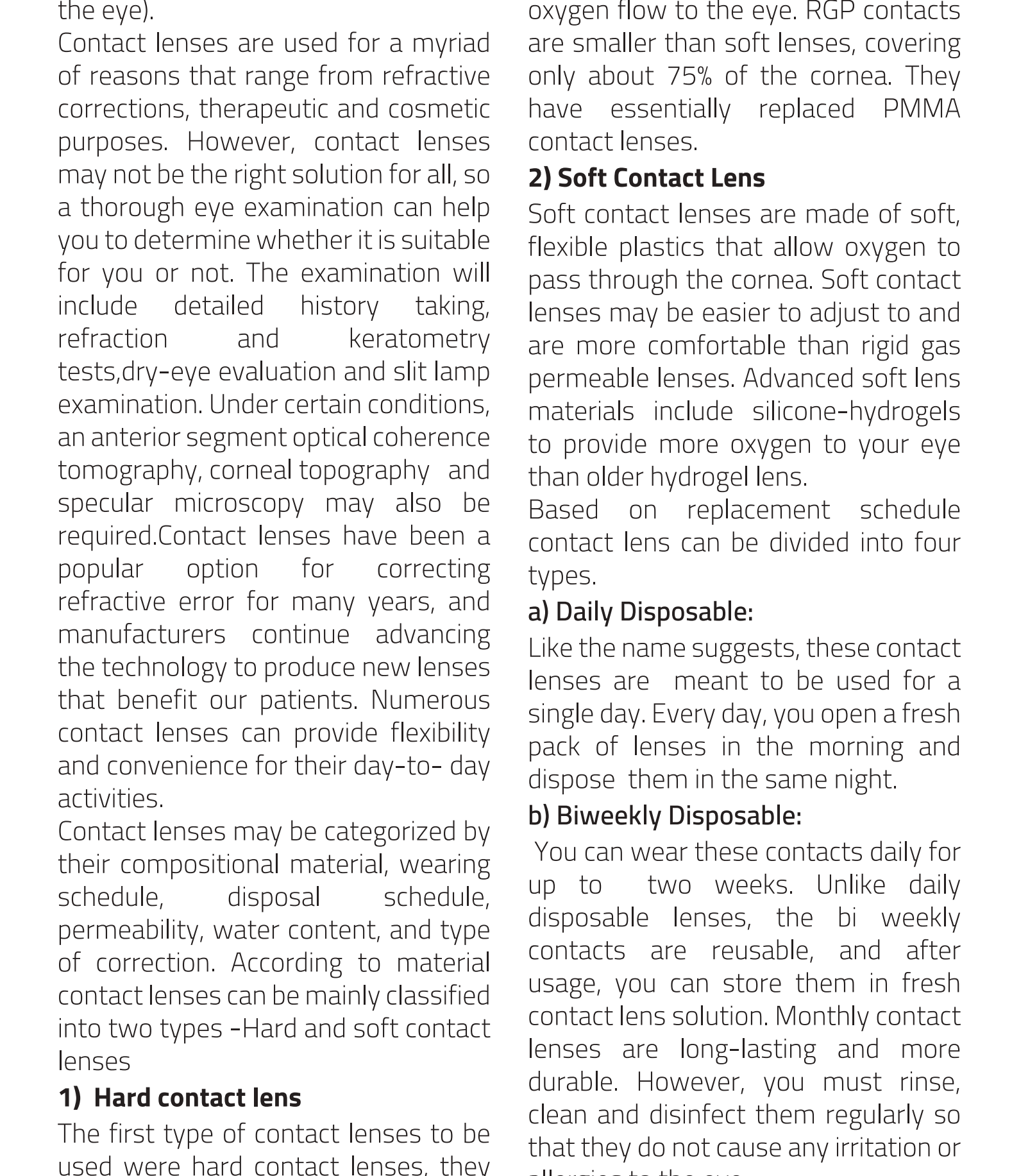


Editor's Note

I welcome all to read the 1st edition of GEI Focus this year, the APRIL 2023 issue. A lot of wonderful activities took place in past couple of months and we are glad to share them with you. Our main focus in this issue is "all about contact lens" which makes an interesting read to know all the services available in our contact lens clinic. We are proud of the accolades won by our doctors in our state conference KSOS 2022 held in November at Calicut. From OPTICON to Glaucoma awareness week, our GEI team was busy in a variety of activities. We are glad to incorporate some lovely art work by our team members and wish to encourage all to contribute regularly to the Talent corner! Hope you enjoy reading this issue!

- Dr Vanashree M Nair



THE WORLD OF CONTACT LENS

Contact lenses are a medical device which rests on sclera (transparent part of the eye) or cornea (white part of the eye).

Contact lenses are used for a myriad of reasons that range from refractive corrections, therapeutic and cosmetic purposes. However, contact lenses may not be the right solution for all, so a thorough eye examination can help you to determine whether it is suitable for you or not. The examination will include detailed history taking, refraction and keratometry tests, dry-eye evaluation and slit lamp examination. Under certain conditions, an anterior segment optical coherence tomography, corneal topography and specular microscopy may also be required. Contact lenses have been a popular option for correcting refractive error for many years, and manufacturers continue advancing the technology to produce new lenses that benefit our patients. Numerous contact lenses can provide flexibility and convenience for their day-to-day activities.

Contact lenses may be categorized by their compositional material, wearing schedule, disposal schedule, permeability, water content, and type of correction. According to material contact lenses can be mainly classified into two types - Hard and soft contact lenses.

1) Hard contact lens

The first type of contact lenses to be used were hard contact lenses, they are made of PMMA, or Plexiglass. These kinds of lenses do not allow oxygen exchange and 'cease' the cornea within hours of use. However, they provide excellent vision. Old-fashioned hard lenses are not available today due to lack of oxygen flow to the eye.

Rigid gas permeable or RGP contact lenses are a form of hard lens, created from rigid plastic (PMMA) and flexible silicone, these lenses allow more oxygen flow to the eye. RGP contacts are smaller than soft lenses, covering only about 75% of the cornea. They have essentially replaced PMMA contact lenses.

Soft contact lenses are made of soft, flexible plastics that allow oxygen to pass through the cornea. Soft contact lenses may be easier to adjust to and are more comfortable than rigid gas permeable lenses. Advanced soft lens materials include silicone-hydrogels to provide more oxygen to your eye than older hydrogel lenses.

Based on replacement schedule contact lens can be divided into four types.

a) Daily Disposable:

Like the name suggests, these contact lenses are meant to be used for a single day. Every day, you open a fresh pack of lenses in the morning and dispose them in the same night.

b) Biweekly Disposable:

You can wear these contacts daily for up to two weeks. Unlike daily disposable lenses, the bi weekly contacts are reusable, and after usage, you can store them in fresh contact lens solution. Monthly contact lenses are long-lasting and more durable. However, you must rinse, clean and disinfect them regularly so that they do not cause any irritation or allergies to the eye.

c) Monthly Disposable:

You can wear these contacts daily for up to a month.

d) Annual Disposable:

These kinds of lenses you can wear up to one year with proper care and maintenance as per eye care providers.

Giridhar Eye Institute contact lens clinic offers a wide range of contact lens services. Our lens highlights are listed here.

Name of Contact Lens	Material	Applications
Soft Contact lens	Soft (Hydro gel and Silicon hydrogel)	Refractive errors-Myopia, Hypermetropia and mild amount of astigmatism
Soft Toric Contact Lens	Soft (Hydro gel and Silicon hydrogel)	Astigmatism
Cosmetic contact lens	Soft (Hydro gel and Silicon hydrogel)	Changing the eye color for cosmetic use
Multifocal contact lens	Soft (Hydro gel and Silicon hydrogel)	Presbyopia
Bandage contact lens	Soft (Hydro gel and Silicon hydrogel)	Therapeutic purpose
X-chrome contact lens	Soft (Hydro gel)	Color vision enhancement lenses for color deficient patients
Prosthetic contact lens	Soft (Hydro gel)	Congenital abnormalities or have experienced traumatic injuries that have disfigured their eyes or cornea.
Traditional RGP	RGP(polymacon& silicon elastomers)	Refractive errors/corneal disorders like Keratoconus, corneal scar, Allergic to soft material
Rose K2 Family	RGP(Furo-90)	High type of Keratoconus, PMD, Post LASIK ectasiae
Piggy back	RGP over Soft	Good optical correction, comfort and enhancement of the corneal irregularities, especially for keratoconus
Hybrid	Combination of soft and RGP	Sharpness and clarity of RGP lens and the wearing comfort of a soft lens for corneal disorders.

Scleral contact Lens

Scleral contact lenses are large diameter RGP lenses that cover the entire corneal surface and rest on the white of the eye. Among the most notable advances in contact lens technology, scleral lenses are "a big thing right now". Scleral contact lenses might be the best solution for the ocular surface disorder like Steven Johnson Syndrome. Other indications for scleral contact lenses are correction of irregular cornea to restore vision which include keratoconus, keratoglobus, post refractive surgeries etc. Scleral lenses can be very advantageous for vigorous sport activities mainly for somewater sports such as water-polo or canoeing, diving and water skiing. Scleral lenses basically do not touch the cornea and therefore there is little or no corneal distortion with

scleral lens wear. We can extend or prevent keratoplasty to some extent with scleral lens.

This is a magical lens in terms of restoring vision, comfort and a healthy life style.

Orthokeratology

This is a revolutionary non-surgical procedure that eliminates the need for glasses or daytime contact lenses. It improves vision by temporarily reshaping your eye while you sleep using specially designed RGP contact lenses. You have to put the specially fitted lenses at bedtime, and when you awake, you will have clear, sharp, natural vision for your waking hours. This safe and effective treatment can be used to correct refractive errors like myopia, hypermetropia and astigmatism. It is a great alternative for those who are not interested to do LASIK surgery.

Follow these healthy habits to safely wear contact lenses and help to protect your eyes:

- **Don't sleep with your contact lenses on.** Don't sleep with your contact lenses unless prescribed by your eye care provider. Sleeping while wearing contact lenses has been shown to cause up to 8 times greater risk of an eye infection.

- **Wash Your Hands**

Always wash your hands with soap or liquid hand wash and water before handling lenses. Dry your hands well with a clean cloth before touching the contact lens every time.

- **Keep contact lenses away from water**

Water can introduce bacteria to the eye through contact lenses and it will cause serious ocular infections. Remove contact lens before swimming and avoid showering in them.

- **Properly clean your lenses**

Rub and rinse your contact lenses with appropriate contact lens disinfecting solution. Never use water or saliva for cleaning. You have to clean the contact lens each time before insertion after removal of lenses.

Use only fresh contact lens disinfecting solution in your case—never mix fresh solution with old or used solution.

Use only the contact lens solution recommended by your eye care provider.

- **Take care of your contact lens case**

Clean your contact lens case by rubbing and rinsing it with contact lens solution or lukewarm water every day and then empty and dry with a clean tissue. Store upside down with the caps off after each use.

Replace your contact lens case at least once in every three months.

- **Talk with your Eye care provider**

Mandatory visit contact lens clinic for follow-up as recommended by eye care provider. Remove your contact lenses immediately and call your eye care provider if you have eye pain, discomfort, redness, or blurred vision.

- **Be prepared**

Carry a backup pair of glasses with a current prescription, in case you have to take out your contact lenses.

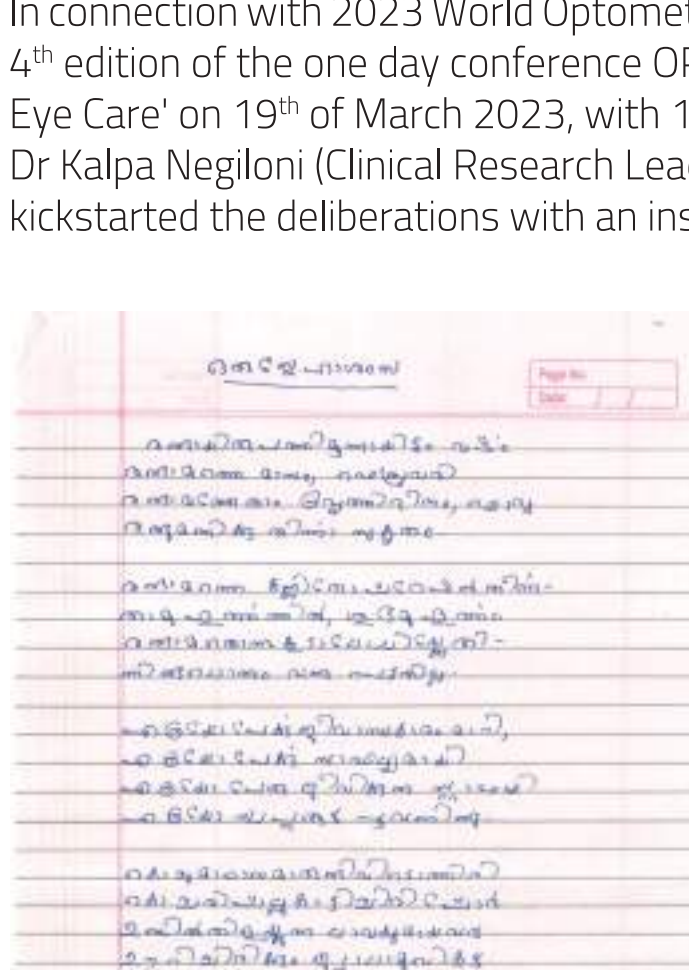
By
Ms Anu Kuriakose
HOD-Optometry and contact lens

Outreach Initiatives January – March at a glance

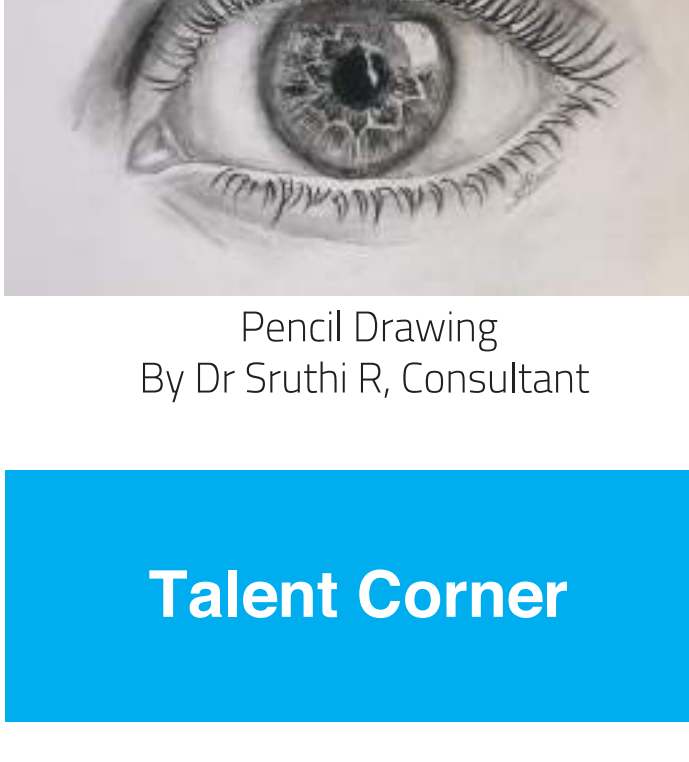
Month	No. of Screening	Patients Screened	Patients Referred	Free Surgeries
January	11	998	439	115
February	13	1505	555	119
March	12	1234	338	144
Total	36	3737	1332	378



Outreach Activities



Dr Abhilash Nair addressed the District level Supervisory Conference of Hospital Superintendents & Medical Officers and presented a session on Glaucoma.



GEI conducted Glaucoma screening program at all three centers in association with KSOS and COC on 15th March

GEI in association with KMRL conducted eye pressure check up campaign for the Metro passengers at Vytilla and Maharajas station on 13th and 16th March respectively.

Dr Saikumar S J was on live at Kairali Channel in connection with the World Glaucoma week awareness campaign actively participated in the Glaucoma Awareness Walk organized by Cochlin Ophthalmic Club on 12th March.

SSM Eye Research Foundation, the charitable wing of Giridhar Eye Institute, with a vision to enhance Road safety proudly inaugurated the FIRST "Raahi Vision Center" in Kerala at Kalamassery (Kochi). With this Pan India project from Sightsavers, one of the leading NGOs in India, SSM Eye Research Foundation has taken the first step in implementing the project in Kerala with Cholamandalam as the sponsors for the project.

To commemorate The World Optometry Day on March the 23rd, the Department Of Optometry at GEI, organized a variety of programs for the day. The day took off with a Dry Eye Awareness address by Dr Rosina Thomas, Ms Anu and Ms Asiya. The Optometry interns carried out patient awareness programmes in various areas at Kadavanthra, Mattancherry and Edappally branches, the target audience being the patients and their bystanders. The interns added a bit of theatricality by enacting a small skit "The Guardians of Vision", highlighting the important role of Optometrists.

Conferences, awards & recognitions

Dr Sugaranjini G has presented a paper titled "A rare case series of patients with coexisting Keratoconus and Pellucid marginal degeneration-What are the treatment possibilities?". This paper was selected as the best paper of the Ectasia session and selected for final round in Keracon 2022.

